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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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01/13/2006

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EXAMINER

BATURAY, ALICIA

ART UNIT

PAPER NUMBER

2155

DATE MAILED: 01/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/988,785	<b>Applicant(s)</b> KIKUCHI, TSUNEYUKI	
	<b>Examiner</b> Alicia Baturay	<b>Art Unit</b> 2155	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 September 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>06042004</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This Office Action is in response to a request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), which was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 23 September 2005 has been entered.
2. Claims 1, 3, 8, 14, 16, 26, and 36 were amended.
3. Claims 1-45 are pending in this Office Action.

### ***Response to Amendment***

4. Applicant's amendments and arguments with respect to claims 1-45 filed on 23 September 2005 have been fully considered but they are deemed to be moot in view of the new grounds of rejection.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 2155

6. Claims 1, 3, 4, 9, 13, 14, 16, 21, 25, 26, 31, 35, 36, 41 and 45 are rejected under 35 U.S.C. 102(e) as being anticipated by Mei et al. (U.S. 6,816,907).

7. With respect to claim 1, Mei teaches a communications system comprising:

A server; a plurality of client terminals; and a communications network which interconnects the server and the plurality of client terminals; each client terminal including means for establishing communication with the server (Mei, col. 4, lines 33-47); the server including: a memory for storing information about a plurality of separate and distinct disconnection conditions regarding disconnection of the plurality of client terminals, where some of the plurality of client terminals have different disconnection conditions than others (Mei, col. 7, line 60 – col. 8, lines 17); decision means for monitoring a connection state between each client terminal and the server and deciding whether or not the connection state corresponds to at least one of the disconnection conditions (Mei, col. 7, lines 11-13); and disconnection means for disconnecting a first client terminal when it is decided that the connection state corresponds to at least one of the disconnection conditions (Mei, col. 7, lines 20-22).

8. With respect to claim 3, Mei teaches a communications system comprising:

A server; a plurality of client terminals; and a communications network which interconnects the server and the plurality of client terminals (Mei, col. 4, lines 33-47); each client terminal including means for transmitting a user identifier to issue a log-in request to the server; the server including: means for logging in client terminals in response to log-in

requests from the plurality of client terminals (Mei, col. 8, lines 30-37); a memory for storing a plurality of separate and distinct disconnection conditions regarding disconnection of the plurality of client terminals in conjunction with the user identifiers, where some of the plurality of client terminals have different disconnection conditions than others (Mei, col. 7, line 60 – col. 8, lines 17); retrieval means for retrieving at least one of the plurality of disconnection conditions based on user identifier transmitted from each client terminal (Mei, col. 8, lines 30-41); and disconnection means for monitoring a connection state between each client terminal and the server (Mei, col. 7, lines 11-13) and disconnecting a first client terminal when the connection state corresponds to the at least one of the disconnection conditions (Mei, col. 7, lines 20-22).

9. With respect to claim 4, Mei teaches the invention described in claim 3, including the communications system where the disconnection means comprises:

Decision means for monitoring said connection state between the client terminal and the server and deciding whether or not the connection state corresponds to the at least one of the disconnection conditions (Mei, col. 7, lines 11-13); and client disconnection means for disconnecting the client terminal when the connection state corresponds to the at least one of the disconnection conditions (Mei, col. 7, lines 20-22).

10. With respect to claim 9, Mei teaches the invention described in claim 3, including the communications system where the memory stores a maximum allowable traffic value that specifies a level of allowable traffic for the client terminal in a predetermined period of time,

Art Unit: 2155

in conjunction with the user identifier (Mei, Figs. 3 and 5; col. 5, lines 44-50); and where the disconnection means comprises means for performing disconnection of the client terminal when a level of actual traffic for the client terminal exceeds the maximum allowable traffic value stored in the memory (Mei, col. 7, lines 20-22).

11. With respect to claims 13, Mei teaches the invention described in claim 3, including the communications system where the memory stores a line disconnecting order in conjunction with the user identifier (Mei, col. 8, lines 30-41); and where the disconnection means is means for performing disconnection of the client terminal in accordance with the line disconnecting order stored in the memory (Mei, col. 7, lines 20-22).

12. Claims 14, 16, 21, 25, 26, 31, 35, 36, 41 and 45 do not teach or define any new limitations above claims 1, 3, 4, 9 and 13 and therefore are rejected for similar reasons.

***Claim Rejections - 35 USC § 103***

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2155

14. Claims 2, 12, 15, 24, 34, and 44 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Mei and further in view of Rao (U.S. 6,789,118).

Mei teaches the invention substantially as claimed including a data communications network includes at least one data processor that operates under control of a stored program resident on a memory media. The stored program directs operation of the data processor to provide users with differentiated services by defining, for individual ones of the plurality of content providers, a plurality of levels of services for users, and for responding to service level tables received from individual ones of the plurality of content providers, where individual ones of users are assigned to one of the plurality of levels of service. There is also at least one resource requirement table for defining at least a minimum set of resources required for realizing individual ones of the plurality of service levels.

15. With respect to claim 2, Mei teaches the invention described in claim 1, including disconnection means for disconnecting a first client terminal when it is decided that the connection state corresponds to at least one of the disconnection conditions (Mei, col. 7, lines 20-22).

Mei does not explicitly teach means for disconnecting the first client terminal logged in for the longest time.

However, Rao teaches the disconnection means comprises means for disconnecting a first client terminal logged in at an earliest time when two or more of the client terminals have a

Art Unit: 2155

same disconnection condition of the plurality of disconnection conditions (Rao, col. 16, lines 49-53).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Mei in view of Rao in order to provide means for disconnecting the first client terminal logged in for the longest time. One would be motivated to do so in order to accommodate the increase in the number and the variety of network traffic with efficiency.

16. Claims 12, 15, 24, 34, and 44 do not teach or define any new limitations above claim 2 and therefore are rejected for similar reasons.

17. Claims 5, 8, 17, 20, 27, 30, 37 and 40 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Mei and further in view of Shaheen (U.S. 6,430,273).

18. With respect to claim 5, Mei teaches the invention described in claim 3, including a memory for storing a plurality of separate and distinct disconnection conditions regarding disconnection of the plurality of client terminals in conjunction with the user identifiers, where some of the plurality of client terminals have different disconnection conditions than others (Mei, col. 7, line 60 – col. 8, lines 17).

Mei does not explicitly teach maximum allowable time as a disconnection condition.

However, Shaheen teaches the communications system where the memory stores a maximum allowable time period between logging-in and disconnection of the client terminal,



Art Unit: 2155

in conjunction with the user identifier; and where the disconnection means comprises means for performing disconnection when a time period that has elapsed after a log-in operation to the server by the client terminal exceeds a maximum allowable time period stored in the memory (Shaheen, col. 5, lines 33-37).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Mei in view of Shaheen in order to enable the use of maximum allowable time as a disconnection condition. One would be motivated to do so in order to enable each customer gets fair use of the modem pool.

19. With respect to claim 8, Mei teaches the invention described in claim 3, including a memory for storing a plurality of separate and distinct disconnection conditions regarding disconnection of the plurality of client terminals in conjunction with the user identifiers, where some of the plurality of client terminals have different disconnection conditions than others (Mei, col. 7, line 60 – col. 8, lines 17).

Mei does not explicitly teach a maximum number of clients simultaneously connected to the server as a disconnection condition.

However, Shaheen teaches the communications system where the memory stores a maximum allowable simultaneous jointer count that specifies a number of the plurality of client terminals that can be simultaneously connected to the server before the client terminal is to be disconnected, in conjunction with the user identifier; and where the disconnection means comprises means for performing disconnection when the number of the plurality of

Art Unit: 2155

client terminals connected to the server exceeds the maximum allowable simultaneous jointer count stored in the memory (Shaheen, col. 5, lines 14-20).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Mei in view of Shaheen in order to enable the use of maximum allowable time as a disconnection condition. One would be motivated to do so in order to One would be motivated to do so in order to enable each customer gets fair use of the modem pool.

20. Claims 17, 20, 27, 30, 37 and 40 do not teach or define any new limitations above claims 5 and 8 and therefore are rejected for similar reasons.

21. Claims 6, 7, 11, 18, 19, 23, 28, 29, 33, 38, 39, and 43 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Mei and further in view of Tanimoto et al. (U.S. 6,075,776).

Mei teaches the invention substantially as claimed including a data communications network includes at least one data processor that operates under control of a stored program resident on a memory media. The stored program directs operation of the data processor to provide users with differentiated services by defining, for individual ones of the plurality of content providers, a plurality of levels of services for users, and for responding to service level tables received from individual ones of the plurality of content providers, where

individual ones of users are assigned to one of the plurality of levels of service. There is also at least one resource requirement table for defining at least a minimum set of resources required for realizing individual ones of the plurality of service levels.

22. With respect to claim 6, Mei teaches the invention described in claim 3, including a memory for storing a plurality of separate and distinct disconnection conditions regarding disconnection of the plurality of client terminals in conjunction with the user identifiers, where some of the plurality of client terminals have different disconnection conditions than others (Mei, col. 7, line 60 – col. 8, lines 17).

Mei does not explicitly teach a timeout period as a disconnection condition.

However, Tanimoto teaches the communications system where the memory stores a maximum allowable non-communication time period for which data is not transmitted or received by the client terminal in conjunction with the user identifier; and where the disconnection means comprises means for performing disconnection when a non-communication time period of the client terminal exceeds the maximum allowable non-communication time period stored in the memory (Tanimoto, col. 6, lines 55-67).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Mei in view of Tanimoto in order to enable the use of maximum allowable time as a disconnection condition. One would be motivated to do so in order to detect terminal disconnection without providing any special system or process at the terminal side.

23. With respect to claim 7, Mei teaches the invention described in claim 6, including the communications system where the server is connected to an application server which stores an application supplied to the client terminal (Mei, col. 4, lines 33-47).

Mei does not explicitly teach a timeout period as a disconnection condition.

However, Tanimoto teaches where the maximum allowable non-communication time period is a maximum allowable time period for which a packet is not communicated between the client terminal and the application server before the client terminal is to be disconnected; and where the disconnection means comprises means for monitoring arrival times of packets that have a transmission destination address or a reception destination address that is the same as an address of the client terminal, and for performing disconnection of the client terminal when a time period elapsed after the arrival time exceeds the maximum allowable non-communication time period stored in the memory (Tanimoto, col. 6, lines 55-67).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Mei in view of Tanimoto in order to enable the use of maximum allowable time as a disconnection condition. One would be motivated to do so in order to detect terminal disconnection without providing any special system or process at the terminal side.

24. With respect to claim 11, Mei teaches the invention described in claim 3, including the communications system where the server is connected to an application server which stores an application supplied from the client terminal (Mei, col. 4, lines 33-47).

Mei does not explicitly teach a timeout period as a disconnection condition.

However, Tanimoto teaches where the memory stores an address of the application server and a timeout time, in conjunction with the user identifier; and where the disconnection means comprises means for monitoring an arrival time of a packet stored in the memory, the packet being a group of an address and a service identifier, and performing disconnection immediately before elapsing a timeout time from the arrival time, the timeout time being stored in the memory in conjunction with the user identifier, the memory belonging to a group of a matching address and a matching service identifier and when the timing of the packet matching a group of an address and a service identifier is not received from an opposite party (Tanimoto, col. 6, lines 55-67).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Mei in view of Tanimoto in order to enable the use of maximum allowable time as a disconnection condition. One would be motivated to do so in order to detect terminal disconnection without providing any special system or process at the terminal side.

25. Claims 18, 19, 23, 28, 29, 33, 38, 39, and 43 do not teach or define any new limitations above claims 6, 7 and 11 and therefore are rejected for similar reasons.

Art Unit: 2155

26. Claims 10, 22, 32, and 42 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Mei and further in view of McNamara (U.S. 6,262,976).

Mei teaches the invention substantially as claimed including a data communications network includes at least one data processor that operates under control of a stored program resident on a memory media. The stored program directs operation of the data processor to provide users with differentiated services by defining, for individual ones of the plurality of content providers, a plurality of levels of services for users, and for responding to service level tables received from individual ones of the plurality of content providers, where individual ones of users are assigned to one of the plurality of levels of service. There is also at least one resource requirement table for defining at least a minimum set of resources required for realizing individual ones of the plurality of service levels.

27. With respect to claim 10, Mei teaches the invention described in claim 3, including a memory for storing a plurality of separate and distinct disconnection conditions regarding disconnection of the plurality of client terminals in conjunction with the user identifiers, where some of the plurality of client terminals have different disconnection conditions than others (Mei, col. 7, line 60 – col. 8, lines 17).

Mei does not explicitly teach the disconnection of a terminal if the data volume of packets exceeds a specific value.

However, McNamara teaches the memory storing a specific volume of data selected from the group of a transmission packet size, a reception packet size, a transmission packet count,

Art Unit: 2155

and a reception packet count, in conjunction with the user identifier; and where the disconnection means comprises means for performing disconnection of the client terminal when a data volume of packets having a transmission or reception destination address the same as an address of the client terminal exceeds the specific volume (McNamara, col. 36, lines 42-54).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Mei in view of McNamara in order to make use a disconnection condition that occurs if a specified packet size is exceeded. One would be motivated to do so in order to decrease the amount of congestion from any one link.

28. Claims 22, 32, and 42 do not teach or define any new limitations above claim 10 and therefore are rejected for similar reasons.

***Response to Arguments***

29. Applicant's arguments filed 23 September 2005 have been fully considered, but they are not persuasive for the reasons set forth below.

30. ***Applicant Argues:*** Applicant states "As amended, claim 1 recites a feature of 'a memory storing information about a plurality of separate and distinct disconnection conditions regarding disconnection of said plurality of client terminals, wherein some of the said plurality of client terminals have different disconnection conditions than others.' The feature described in the present paragraph is neither described nor suggested by Tanimoto, McNamara, nor Roa, individually or in combination."

***In Response:*** The examiner respectfully submits that Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

31. ***Applicant Argues:*** Applicant states "Claims 5, 17, and 27 recite a feature where the disconnection occurs 'when a time period that has elapsed after a log-in operation to said server by said client terminal exceeds said maximum allowable time period stored in said memory.' This feature is not described or suggested in any of the references."

***In Response:*** The examiner respectfully submits that Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.



32. ***Applicant Argues:*** Applicant states “Claims 8, 20, 30 and 40 all recite a disconnection condition based on the ‘a maximum allowable simultaneous jointer counter that specifies a number of said plurality of client terminals that can be simultaneously connected to the server before the client terminal is to be disconnected, in conjunction with the user identifier.’ This feature is not described or suggested by Tanimoto, McNamara, or Rao.”

***In Response:*** The examiner respectfully submits that Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

33. ***Applicant Argues:*** Applicant states “Claims 13, 25, 35, and 45 recite a feature where the ‘memory stores a line disconnecting order in conjunction with said user identifier.’ This feature is neither described nor suggested by any of the cited references.”

***In Response:*** The examiner respectfully submits that Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

34. ***Applicant Argues:*** Applicant states “Claims 9, 21, 31, and 41 recite a feature where the ‘memory stores a maximum allowable traffic value that specifies a level of allowable traffic for said client terminal in a predetermined period of time.’ In this feature, the disconnection condition depends on the total traffic over a predetermined period of time. This feature is not described or suggested by any of the cited references.”

***In Response:*** The examiner respectfully submits that Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.


*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Baturay whose telephone number is (571) 272-3981. The examiner can normally be reached at 7:30am - 5pm, Monday - Thursday, and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571) 272-4006. The fax number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Alicia Baturay  
January 6, 2006

  
SALEH NAJJAR  
SUPERVISORY PATENT EXAMINER